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PRODUCTION OF HYDROCYANATION CATALYSTS

ABSTRACT OF THE DISCLOSURE

Hydrocyanation catalysts comprising aqueous solutions of at least one water-soluble phosphine and nickel values, well suited for the hydrocyanation of ethylenically unsaturated organic compounds such as diolefins, olefinic nitriles and monolefins, are produced by (a) admixing an aqueous solution of such at least one water-soluble phosphine with a nickel hydroxide, (b) adding hydrogen cyanide or a compound which generates hydrogen cyanide to the mixture thus formed, (c) stirring the resulting mixture until the nickel values have at least partially dissolved, and (d) reducing at least a portion of said nickel values having an oxidation state of greater than zero to the zero oxidation state.